

2021-6114  
2022-08-16

This label has been updated according to the re-evaluation decision of Imidacloprid RVD2021-05. While users are encouraged to follow this updated label immediately, the previously approved label is valid until 19/05/2023 in accordance with the phase out period set out in the re-evaluation/special review decision of Imidacloprid RVD2021-05. This previously approved label will be provided upon request by emailing [hc.ppra.info-arla.sc@canada.ca](mailto:hc.ppra.info-arla.sc@canada.ca). In your email please include the product name and Registration number of the label you are requesting.

# MERIT™ 60 WP

## Greenhouse and Nursery Insecticide

GROUP	<b>4</b>	INSECTICIDE
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FOR SYSTEMIC CONTROL OF LISTED INSECT PESTS ON ORNAMENTAL AND VEGETABLE PLANTS GROWN IN GREENHOUSES AND NURSERIES

COMMERCIAL

ACTIVE INGREDIENT: Imidacloprid ..... 60.0%

REGISTRATION NUMBER 25636 PEST CONTROL PRODUCTS ACT

**READ THE LABEL AND LEAFLET BEFORE USING  
KEEP OUT OF REACH OF CHILDREN**



**CAUTION**

**POISON**

**NET CONTENTS: 250 g**

Bayer CropScience Inc.  
Suite 200, 160 Quarry Park Blvd. S.E.  
CALGARY, ALBERTA  
T2C 3G3  
Product Information: 1-888-283-6847  
[www.bayeres.ca](http://www.bayeres.ca)

**NOTICE TO USER:** This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label.

## PRECAUTIONS

### KEEP OUT OF REACH OF CHILDREN

**CAUTION:** May be harmful if swallowed, inhaled, or absorbed through skin. Causes eye irritation. Avoid contact with skin, eyes, or clothing. Do not breathe dust or vapor.

When handling the product, wear long-sleeved shirt, long pants, and chemical-resistant gloves. Mixer/loaders should also wear a dust mask or respirator with appropriate dust filter, and goggles or face shield in addition to the above.

Vacate the area to be treated until the application is complete.

Follow manufacturer's instructions for cleaning/ maintaining Personal Protective Equipment (PPE). If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

### User Safety Recommendations:

User should:

1. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
2. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
3. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

NOTE: If this pest control product is to be used on a commodity that may be exported and you require information regarding Maximum Residue Limits for an importing country, please contact Bayer CropScience Canada Inc. at 1-888-283-6847 or [www.cropscience.bayer.ca](http://www.cropscience.bayer.ca).

## USE LIMITATIONS

Do **not** allow leachate runoff for the first 10 days after application, in order to retain the product and facilitate full plant uptake of the active ingredient. Do not apply to bedding plants intended to be used as food crops.

On plants with a production cycle of less than one year, do not apply more than once per crop. On stock plants and woody crops with a production cycle of greater than one year, do not apply more than once a year. Do not dispose of treated soil or otherwise contaminate sites outside of greenhouses.

Although soil treatments will minimize direct harm to non-target and beneficial invertebrates, MERIT 60 WP Insecticide may affect certain beneficial predators, parasites and pollinators which may be used in greenhouse ornamental and vegetable production.

## ENVIRONMENTAL PRECAUTIONS

Keep out of lakes, streams, ponds or other aquatic systems. Do not contaminate water when disposing of equipment washwaters.

Toxic to aquatic organisms.

Toxic to small wild mammals.

Toxic to birds.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

Toxic to certain beneficial arthropods (which may include predatory and parasitic insects, spiders, and mites). Minimize spray drift to reduce harmful effects on beneficial arthropods in habitats next to the application site such as hedgerows and woodland.

To reduce runoff from treated areas into aquatic habitats avoid application to areas with a moderate to steep slope, compacted soil, or clay.

Avoid application when heavy rain is forecast.

Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative strip between the treated area and the edge of the water body.

This product demonstrates the properties and characteristics associated with chemicals detected in groundwater. The use of this product in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

Imidacloprid is persistent and may carry over. It is recommended that this product not be used in areas treated with any products containing imidacloprid during the previous season.

Greenhouse use: Toxic to bees and other beneficial arthropods (which may include predatory and parasitic insects, spiders, and mites). This product is systemic, and residues may be transported through plants into leaves, pollen and nectar. May harm bees and other beneficial arthropods, including those used in greenhouse production. Avoid application when bees or other beneficial arthropods are in the treatment area.

## FIRST AID

If swallowed: Call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre or doctor for treatment advice.

If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

If in eyes: Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

**TOXICOLOGICAL INFORMATION:** No specific antidote is available. Treat the patient symptomatically.

## STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

**PESTICIDE STORAGE:** Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

**PESTICIDE DISPOSAL:** For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

**CONTAINER DISPOSAL:** Do not reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
2. Make the empty, rinsed container unsuitable for further use.

If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

# MERIT™ 60 WP

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## DIRECTIONS FOR USE

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

As this product is not registered for the control of pests in aquatic systems, DO NOT use to control aquatic pests. DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

**IMPORTANT:** Read these entire DIRECTIONS FOR USE AND GENERAL INFORMATION before using MERIT 60 WP.

### **Do not formulate this product into other end-use products.**

**APPLICATION IN GREENHOUSES:** MERIT 60 WP is for insect control on ornamental and vegetable plants in greenhouses. MERIT 60 WP is a systemic product and will be translocated upward within the plant. This product is to be applied as a soil or soilless media/hydroponic treatment only. To assure optimum effectiveness, the product must be placed where the roots of the plant can absorb the active ingredient. Irrigate moderately but thoroughly after application, allowing no leaching and runoff from container for at least 10 days after application. Do not apply as a foliar application.

DO NOT allow releases, effluent or runoff from greenhouses containing this product to enter lakes, streams, ponds or other waters.

Additional requirement for greenhouses using closed recirculation system (e.g. closed chemigation): Only to be used in greenhouse facilities that have undergone a third-party audit that validates the facility's closed recirculation systems and other measures are sufficient to prevent releases, effluent or runoff containing this product from entering lakes, streams, ponds, or other waters.

**APPLICATION IN NURSERIES:** MERIT 60 WP is for control of European Chafer (*Rhizotrogus majalis*) and Japanese beetle (*Popillia japonica*) larvae in field grown and container grown nursery stock including: coniferous evergreens and ornamental grasses. MERIT 60 WP is a systemic product. First and second instar larvae of the European Chafer and Japanese beetle ingest MERIT 60 WP from soil particles and plant roots. Avoid runoff or puddling of irrigation water following application.

- One application per year.
- Do not apply when rainfall is forecast for the next 48 hours.
- Repellency of bumble bee pollinators and negative effects on some beneficials (*Orius* sp.) can occur when MERIT 60 WP is applied.
- Do not harvest nursery stock within 12 hours of treatment.
- Apply MERIT 60 WP during adult beetle mating period/egg laying period up to first egg hatch.
- The need for and timing of application should be based on monitoring of the sites, previous records or experiences, current season adult trapping or other methods.

**Incorporation:** Incorporation of MERIT 60 WP in plants grown in Greenhouses can be achieved by cultivation, irrigation, mechanical placement, drenching and broadcast sprays.

Incorporation of MERIT 60 WP in Container Grown Nursery Stock can be achieved by irrigation or drenching. For Field Grown Nursery stock, incorporation of MERIT 60 WP can be achieved by broadcast spray and incorporated into soil with overhead irrigation.

**NOTE:** Woody Perennials: Onset of protection is slower than in herbaceous species. A delay of 2 or more weeks should be expected. Longer delays may be expected with larger plants. Application should therefore be made well in advance of expected insect activity.

**Bark Media:** Media with 30 to 50% or more bark content may confer a shorter period of protection when treated with MERIT 60 WP.

Tank Mixes: MERIT 60 WP has been found to be compatible with commonly used liquid fertilizers.

When tank-mixes are permitted, read and observe all label directions, including rates and restrictions for each product used in the tank-mix. Follow the more stringent label precautionary measures for mixing, loading and applying stated on both product labels.

Treated soil/soilless media may be replanted with any crop specified on an imidacloprid label, or any crop for which a tolerance exists for the active ingredient, **as soon as practical following the last application**. Do not plant other food crops in treated soil/soilless media within one year of treatment.

**For Field Grown Nursery stock, do not apply through any irrigation system.**

**Do not apply by aerial application.**

Do not apply when wind speeds are greater than 12 –15 km per hour at site of application.

APPLICATION EQUIPMENT FOR USE IN FIELD GROWN NURSERY STOCK: Apply MERIT 60 WP in sufficient water to provide adequate distribution in the treated area. Use equipment which will produce a uniform, coarse droplet spray, using a low pressure setting to eliminate off-target drift. Check calibration periodically to ensure that equipment is working properly.

APPLICATION EQUIPMENT FOR USE ON GREENHOUSE ORNAMENTALS AND VEGETABLES AND ON CONTAINER GROWN NURSERY STOCK: Apply MERIT 60 WP in sufficient water to provide adequate distribution in the treated area. The use of accurately calibrated equipment normally used for soil application of insecticides (drip irrigation) is required. Use equipment which will produce a uniform, coarse droplet spray, using a low pressure setting to eliminate off-target drift. Check calibration periodically to ensure that equipment is working properly.

#### APPLICATION THROUGH IRRIGATION SYSTEMS

MERIT 60 WP may be applied at rates on this label. The normal dilution ratio is 1:10 to 1:200, depending on the system. Always meter the product into the irrigation water during the first part of the irrigation cycle. The product may be mixed separately prior to injection. Agitation may be necessary if the mixture is allowed to stand more than 24 hours.

Remove scale, pesticide residue and other foreign matter from the tank and entire irrigation system.

Apply MERIT 60 WP only through micro-irrigation (individual spaghetti tube), drip irrigation, overhead irrigation, or hand-held or motorized calibrated irrigation equipment. Do not apply this product through any other type of irrigation system. Crop injury or lack of effectiveness can result from nonuniform distribution of treated water.

If you have any questions about calibration, you should contact Provincial Extension specialists, equipment manufacturers or other experts.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the recommended safety devices for public water systems are in place.

A person knowledgeable of the chemigation system and responsible for its operation, or a person who is under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

#### SAFETY DEVICES FOR IRRIGATION SYSTEMS CONNECTED TO PUBLIC WATER SUPPLIES:

If the source of water for your irrigation system is a public water supply, follow the instructions below.

1. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside

diameter of the fill pipe.

2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
3. The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
5. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

#### SAFETY DEVICES FOR IRRIGATION SYSTEMS NOT CONNECTED TO A PUBLIC WATER SUPPLY:

1. The system must contain a functional check valve, vacuum relief valve and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
3. The pesticide injection pipeline must also contain a functional normally closed solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
5. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where the pesticide distribution is adversely affected.
6. Systems must use a metering pump such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

#### MIXING INSTRUCTIONS

To prepare the spray, add a portion of the required amount of water to the spray tank and with agitation, add MERIT 60 WP. Complete filling the tank with balance of water needed. Maintain sufficient agitation during both mixing and application.

#### RESISTANCE MANAGEMENT RECOMMENDATIONS

For resistance management, MERIT 60 WP contains a Group 4 insecticide. Any insect population may contain individuals naturally resistant to MERIT 60 WP and other Group 4 insecticides. The resistant individuals may dominate the insect population if this group of insecticides is used repeatedly in the same fields. Other resistance mechanisms that are not linked to site of action, but specific for individual chemicals, such as enhanced metabolism, may also exist. Appropriate resistance-management strategies should be followed.

To delay insecticide resistance:

- Where possible, rotate the use of MERIT 60 WP or other Group 4 insecticides with different groups that control the same pests.



- Use tank mixtures with insecticides from a different group that is effective on the target pest when such use is permitted.
- Insecticide use should be based on an IPM program that includes scouting, record keeping, and considers cultural, biological and other chemical control practices.
- Monitor treated pest populations for resistance development.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or IPM recommendations for the specific site and pest problems in your area.
- For further information or to report suspected resistance contact Bayer CropScience via internet at 1-888-283-6847 or at [www.rcropscience.bayer.ca](http://www.rcropscience.bayer.ca).

### DRENCH AND IRRIGATION APPLICATIONS

For use only on greenhouse plants as a soil drench using micro-irrigation, drip irrigation, overhead irrigation, or hand-held or motorized calibrated irrigation equipment.

PEST	CROP		DOSAGE	REMARKS
APHIDS WHITE- FLIES	GREENHOUSE VEGETABLES  Mature Plants in Production Greenhouse	Cucumber	16 g in 80 L of water per 1000 plants	<ul style="list-style-type: none"> <li>• Do not apply more than once per season. Do not apply within 1 day of harvest for tomatoes and cucumbers.</li> <li>• Caution: Do not apply to immature plants since phytotoxicity may occur at the labelled rates of application.</li> <li>• MERIT 60 WP should always be used in conjunction with IPM (Integrated Pest Management) Practices.</li> <li>• Applications should be made when infestation pressure surpasses threshold and beneficials are not able to maintain pest populations below damage thresholds.</li> <li>• Toxic to bees and other beneficial arthropods (which may include predatory and parasitic insects, spiders and mites). This product is systemic, and residues may be transported through plants into leaves, pollen and nectar. May harm bees and other beneficial arthropods, including those used in greenhouse production. Avoid application when bees or other beneficial arthropods are in the treatment area.</li> <li>• Repellency of bumble bee pollinators and negative effects on some beneficials (<i>Orius</i> sp.) can occur when MERIT 60 WP is applied.</li> </ul>
		Tomato	16 g in 60 L of water per 1000 plants	

The DIRECTIONS FOR USE for the uses described in this section of the label were developed by persons other than Bayer CropScience under the User Requested Minor Use Label Expansion program. For these uses, Bayer CropScience has not fully assessed performance (efficacy) and/or crop tolerance (phytotoxicity) under all environmental conditions or for all crop varieties when used in accordance with the label. The user should test the product on a small area first, under local conditions and using standard practices, to confirm the product is suitable for widespread application.

### DRENCH AND IRRIGATION APPLICATIONS

For use only on greenhouse plants as a soil drench using micro-irrigation, drip irrigation, overhead irrigation, or hand-held or motorized calibrated irrigation equipment.

PEST	CROP		DOSAGE	REMARKS
APHIDS* WHITE-FLIES	GREENHOUSE VEGETABLES	Peppers  Eggplant	16 g in 70 L of water per 1000 plants	<ul style="list-style-type: none"> <li>• Do not apply more than once per crop cycle. Do not apply within 3 days of harvest for peppers and eggplants.</li> <li>• Caution: Do not apply to immature plants since phytotoxicity may occur at labelled rates of application.</li> <li>• MERIT 60 WP should always be used in conjunction with IPM (Integrated Pest Management) Practices.</li> <li>• Applications should be made when infestation pressure surpasses threshold and beneficials are not able to maintain pest populations below damage thresholds.</li> <li>• Toxic to bees and other beneficial arthropods (which may include predatory and parasitic insects, spiders and mites). This product is systemic, and residues may be transported through plants into leaves, pollen and nectar. May harm bees and other beneficial arthropods, including those used in greenhouse production. Avoid application when bees or other beneficial arthropods are in the treatment area.</li> <li>• Repellency of bumble bee pollinators and negative effects on some beneficials (<i>Orius</i> sp.) can occur when MERIT 60 WP is applied.</li> <li>• Do not apply as a foliar application. This product is to be applied as a soil/soilless media/hydroponic treatment only. To assure optimum effectiveness, the product must be placed where the roots of the plant can absorb the active ingredient. Irrigate moderately but thoroughly after application, allowing no leaching and runoff from container for at least 10 days after application.</li> </ul>

Note: MERIT 60WP should always be used in conjunction with IPM (Integrated Pest Management) Practices.

\*Green Peach Aphid for peppers.

ADDITIONAL CAUTIONS: Many varieties of vegetables have been tested for tolerance to imidacloprid and shown good safety. However, certain varieties may show more sensitivity to application of imidacloprid and therefore, treatment of a few plants is recommended before application is made to the whole greenhouse

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### DRENCH AND IRRIGATION APPLICATIONS

For use only on greenhouse lettuce in seedling blocks as a soil drench using micro-irrigation, drip irrigation, or motorized calibrated irrigation equipment.

CROP	PEST	DOSAGE	REMARKS
Greenhouse Lettuce	Aphids (including green peach aphid, lettuce aphid, and melon aphid)  Whitefly	<p><b>Transplant Tray Plug Drench</b></p> <p>4.1 g /1000 seedling plants</p>	<ul style="list-style-type: none"> <li>• Mix required amount of product in sufficient water to uniformly and accurately cover the area being treated and thoroughly wet seedling blocks.</li> <li>• <b>Do not use less than 15L solution per 100m<sup>2</sup> of seedling trays.</b></li> <li>• Irrigate treated area lightly after application to ensure MERIT 60 WP Greenhouse and Nursery Insecticide reaches the root zone but does not leach out of the plug.</li> <li>• <b>APPLICATION TIMING: Apply product prior to transplanting. Note:</b> Allow a minimum of 10 days between the application of MERIT 60WP Greenhouse and Nursery Insecticide and transplanting for sufficient uptake of the active ingredient by seedling roots for a residual control of the target pest. Do not allow leachate run out for the first 10 days after application, in order to retain the product and facilitate full plant uptake of the active ingredient.</li> <li>• Do not apply more than once per crop cycle.</li> <li>• Do not apply using handheld irrigation equipment. Use motorized automated application equipment only.</li> <li>• Allow at least 28 days after MERIT 60WP Greenhouse and Nursery Insecticide application to harvest.</li> <li>• MERIT 60 WP Greenhouse and Nursery Insecticide should always be used in conjunction with IPM (Integrated Pest Management) Practices.</li> </ul> <p><b>ADDITIONAL CAUTIONS:</b> Many varieties of vegetables have been tested for tolerance to imidacloprid and shown good safety. However, certain varieties may show more sensitivity to application of imidacloprid and therefore, treatment of a few plants is recommended before application is made to the whole greenhouse.</p>

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### DRENCH AND IRRIGATION APPLICATIONS

For use as a soil drench using micro-irrigation, drip irrigation, or hand-held or motorized calibrated irrigation equipment.

CROP	PEST	DOSAGE	REMARKS
Head & Stem Brassica subgroup 5A (including cabbage, broccoli, cauliflower, Nappa cabbage, Chinese broccoli, Brussels sprouts, Chinese mustard cabbage, kohlrabi)	Swede Midge	<p><b>Transplant Tray Plug Drench</b></p> <p>4.1 grams/1000 seedlings</p>	<ul style="list-style-type: none"> <li>• Mix required amount of product in sufficient water to uniformly and accurately cover the area being treated and thoroughly wet seedling blocks.</li> <li>• <b>Do not use less than 15L solution per 100m<sup>2</sup> of seedling trays.</b></li> <li>• Irrigate treated area lightly after application to ensure MERIT 60 WP reaches the root zone but does not leach out of the plug.</li> <li>• <b>APPLICATION TIMING:</b> Apply during seedling stage prior to transplanting. Note: Allow a minimum of 10 days between application of MERIT 60WP and transplanting for sufficient uptake of the active ingredient by the seedling roots for a residual control of the target pest. Do not allow leachate runoff for the first 10 days after application, in order to retain the product and facilitate full plant uptake of the active ingredient.</li> <li>• Do not apply more than once per crop cycle.</li> <li>• Allow at least 21 days after MERIT 60WP application to harvest.</li> <li>• MERIT 60 WP should always be used in conjunction with IPM (Integrated Pest Management) Practices.</li> </ul> <p><b>ADDITIONAL CAUTIONS:</b> Many varieties of vegetables have been tested for tolerance to imidacloprid and shown good safety. However, certain varieties may show more sensitivity to application of imidacloprid and therefore, treatment of a few plants is recommended before application is made to the whole greenhouse.</p>

## DRENCH AND IRRIGATION APPLICATIONS GREENHOUSE ORNAMENTALS

For use only on greenhouse grown coniferous evergreens, ornamental grasses, cut flowers and plants grown for indoor use only as a soil drench using micro-irrigation, drip irrigation, overhead irrigation, or hand-held or motorized calibrated irrigation equipment.

PEST	CROP	USE PATTERN & DOSAGE - MERIT 60 WP			REMARKS
APHIDS WHITE- FLIES	<b>Coniferous evergreens</b> (pine, fir, juniper, spruce, arborvitae, hemlock, cypress, yew, live Christmas trees) <b>Ornamental Grasses</b> <b>Greenhouse Grown Cut flowers</b> <b>Indoor potted plants:</b> Plants grown for indoor use only (e.g., potted plants maintained indoors)	Herbaceous Species (one or two plants per pot)	Container Size mm (inches)	No. pots treated with 100 grams of product	Apply to moist media. Use sufficient drench solution to wet most of the potting medium without loss of liquid from the bottom of the container. Follow application with moderate irrigation. Irrigate carefully during the next 10 days in order to avoid loss of active ingredient due to leaching.  Do not apply more than once per crop cycle,  Application rate is dependent on plant type, number of plants per pot and pot size (see MERIT 60 WP Dosage Chart). For example, if desired drench rate is 150 mL per 150 mm (6") pot for Herbaceous species, 1 or 2 plants per pot and the drench solution supply tank is 1000 L, mix 133 grams of MERIT 60 WP per 1000 L of water.  EXAMPLE: 1000 L of water ÷ 0.150 L (150 mL)/pot = 6667 pots treated/1000 L  $\frac{6667 \text{ pots treated} \times 100 \text{ g MERIT 60 WP}}{1000\text{L} \quad 5000 \text{ pots}}$ = 133 g MERIT 60 WP/1000 L of drench water
		0.002 g ai per 2.5 cm (1") pot  Herbaceous Species (three or more plants per pot), Woody Perennials	65 (2) 75 (3) 100 (4) 130 (5) 150 (6) 180 (7) 200 (8) 230 (9) 250 (10) 280 (11) 300 (12)	15,000 10,000 7,500 6,000 5,000 4,250 3,750 3,375 3,000 2,750 2,500	
		0.003 g ai per 2.5 cm (1") pot	65 (2) 75 (3) 100 (4) 130 (5) 150 (6) 180 (7) 200 (8) 230 (9) 250 (10) 280 (11) 300 (12)	10,000 6,750 5,000 4,000 3,250 2,750 2,500 2,250 2,000 1,750 1,500	

## DRENCH APPLICATIONS CONTAINER GROWN NURSERY ORNAMENTALS

For use on coniferous evergreens and ornamental grasses grown in containers as a soil drench using micro-irrigation, drip irrigation, overhead irrigation, or hand-held or motorized calibrated irrigation equipment.

PEST	CROP	USE PATTERN & DOSAGE - MERIT 60 WP		REMARKS
		Container Size mm (inches) in diameter	Rate of Product in mg/Pot	
Larvae of European Chafer ( <i>Rhizotrogus majalis</i> ) and Japanese beetle ( <i>Popillia japonica</i> )	<b>Coniferous evergreens</b> (pine, fir, juniper, spruce, arborvitae, hemlock, cypress, yew, live Christmas trees) <b>Ornamental Grasses</b>	180 mm (7")	1.19	<p>Apply to moist media. Use sufficient drench solution to wet most of the potting medium without loss of liquid from the bottom of the container.</p> <p>Follow application with moderate irrigation. Irrigate carefully during the next 10 days in order to avoid loss of active ingredient due to leaching.</p> <p><b>EXAMPLE:</b></p> <p>To calculate the surface area of a container: First calculate the radius: 180 mm diameter/2 = 90 mm radius Then use the formula: <math>(3.14 \times (90^2))/1,000,000 = 0.0254 \text{ m}^2</math></p> <p>To calculate the rate of product in mg per pot: <math>0.0254 \times 467 \text{ (g product/Ha)} = 11.9/10,000 = 0.00119\text{g} / 180 \text{ mm pot} = 1.19 \text{ mg/pot}</math></p> <p>A 180-mm container requires 1.19 mg product/pot.</p> <p>If treating 100 containers (180-mm diameter), the amount of product required would be <math>100 \times 1.19 \text{ mg} = 119 \text{ mg}</math> or 0.119 g of product.</p> <p>If desired drench rate is 150 mL water per 180 mm pot (this amount should not leach out of bottom of pot) then the amount of water required to treat 100 pots (180 mm dia.) would be <math>(100 \times 150) / 1000 = 15</math> Litres of water.</p> <ul style="list-style-type: none"> <li>• Do not apply more than once per year.</li> <li>• Caution: Do not apply to immature plants since phytotoxicity may occur at the labeled rates of application.</li> <li>• MERIT 60 WP should always be used in conjunction with IPM (Integrated Pest Management) Practices.</li> <li>• Applications should be made when infestation pressure surpasses threshold and beneficials are not able to maintain pest populations below damage thresholds.</li> <li>• Repellency of bumble bee pollinators and negative effects on some beneficials (<i>Orius</i> sp.) can occur when MERIT 60 WP is applied.</li> <li>• Do not harvest nursery stock within 12 hours of treatment</li> </ul>
		230 mm (9")	1.94	
		280 mm (11")	2.87	
		300 mm (12")	3.30	



## APPLICATIONS FIELD GROWN NURSERY ORNAMENTALS

PEST	CROP	DOSAGE of MERIT 60WP Greenhouse Insecticide	REMARKS
<p>Larvae of European Chafer (<i>Rhizotrogus majalis</i>) and Japanese beetle (<i>Popillia japonica</i>)</p>	<p>FIELD GROWN NURSERY ORNAMENTALS:  <b>Coniferous evergreens</b> (pine, fir, juniper, spruce, arborvitae, hemlock, cypress, yew, live Christmas trees)  <b>Ornamental Grasses</b></p>	<p>467 g/ha (280 g a.i./ha)</p>	<p><b>GROUND APPLICATION ONLY</b></p> <ul style="list-style-type: none"> <li>• One application per year.</li> <li>• Apply in 200 L of water per hectare.</li> <li>• Apply as a directed spray to the ground area around nursery stock planted in rows using a band 15 cm wider than the actual root ball to be dug. Do not allow adjacent bands to overlap. Also, can be applied to grass-covered rows, row middles, drive lanes, headlands and other grassy areas in and around the nursery plantation where larvae are likely to be found.</li> <li>• Apply as a broadcast spray over the top of small woody ornamentals planted in field grown beds.</li> <li>• Do not apply when rainfall is forecast for the next 48 hours.</li> <li>• Sufficient irrigation (e.g., 5 – 10 mm) should occur within 24 hours after application to move the active ingredient to the plant root zone but avoid over watering (e.g., more than 20 mm).</li> <li>• If large weeds and grasses are present, mow weeds and grassy areas to a 5 – 8 cm height before application so uniformity of application will not be affected.</li> <li>• Avoid mowing treated areas until after irrigation has occurred so that uniformity of application will not be affected.</li> <li>• Apply MERIT 60 WP during adult beetle mating period/egg laying period up to first egg hatch. • The need for and timing of application should be based on monitoring of the sites, previous records or experiences, current season adult trapping or other methods.</li> <li>• Apply MERIT 60 WP only once per year as directed by this label.</li> <li>• Repellency of bumble bee pollinators and negative effects on some beneficials (<i>Orius</i> sp.) can occur when MERIT 60 WP is applied.</li> <li>• Do not harvest nursery stock within 12 hours of treatment</li> </ul>

NOTE : MERIT 60 WP should always be used in conjunction with IPM (Integrated Pest Management) Practices.

### PRECAUTIONS

#### KEEP OUT OF REACH OF CHILDREN

CAUTION: May be harmful if swallowed, inhaled, or absorbed through skin. Causes eye irritation. Avoid contact with skin, eyes, or clothing. Do not breathe dust or vapor.

When handling the product, wear long-sleeved shirt, long pants, and chemical-resistant gloves. Mixer/loaders should also wear a dust mask or respirator with appropriate dust filter, and goggles or face shield in addition to the above.

Vacate the area to be treated until the application is complete.

Follow manufacturer's instructions for cleaning/ maintaining Personal Protective Equipment (PPE). If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.



For foliar application in field nursery: DO NOT enter or allow worker or bystander entry into treated areas during the restricted entry interval (REI) of 12 hours. DO NOT sell, ship or export plants within 12 hours of treatment.

#### User Safety Recommendations:

User should:

1. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
2. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
3. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

NOTE: If this pest control product is to be used on a commodity that may be exported and you require information regarding Maximum Residue Limits for an importing country, please contact Bayer CropScience Canada Inc. at 1-888-283-6847 or [www.cropscience.bayer.ca](http://www.cropscience.bayer.ca).

#### USE LIMITATIONS

Do **not** allow leachate runoff for the first 10 days after application, in order to retain the product and facilitate full plant uptake of the active ingredient. Do not apply to bedding plants intended to be used as food crops.

On plants with a production cycle of less than one year, do not apply more than once per crop. On stock plants and woody crops with a production cycle of greater than one year, do not apply more than once a year. Do not dispose of treated soil or otherwise contaminate sites outside of greenhouses.

Although soil treatments will minimize direct harm to non-target and beneficial invertebrates, MERIT 60 WP may affect certain beneficial predators, parasites and pollinators which may be used in greenhouse ornamental and vegetable production.

#### ENVIRONMENTAL PRECAUTIONS

Keep out of lakes, streams, ponds or other aquatic systems. Do not contaminate water when disposing of equipment washwaters.

Toxic to aquatic organisms.

Toxic to small wild mammals.

Toxic to birds.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

Toxic to certain beneficial arthropods (which may include predatory and parasitic insects, spiders, and mites). Minimize spray drift to reduce harmful effects on beneficial arthropods in habitats next to the application site such as hedgerows and woodland.

To reduce runoff from treated areas into aquatic habitats avoid application to areas with a moderate to steep slope, compacted soil, or clay.

Avoid application when heavy rain is forecast.

Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative strip between the treated area and the edge of the water body.

This product demonstrates the properties and characteristics associated with chemicals detected in groundwater. The use of this product in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

Imidacloprid is persistent and may carry over. It is recommended that this product not be used in areas treated with any products containing imidacloprid during the previous season.

Greenhouse use: Toxic to bees and other beneficial arthropods (which may include predatory and parasitic insects, spiders, and mites). This product is systemic, and residues may be transported through plants into leaves, pollen and nectar. May harm bees and other beneficial arthropods, including those used in greenhouse production. Avoid application when bees or other beneficial arthropods are in the treatment area.

**For Field and Container Grown Nursery Stock:** Do not apply within 30 metres of environmentally sensitive areas such as lakes, streams, rivers or other aquatic systems. Do not apply to terrains where there is a potential for surface run-off to enter aquatic systems. Do not mix, load or clean equipment within 30 metres of wellheads or aquatic systems.

Apply this product only in accordance with this label.

## FIRST AID

If swallowed: Call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre or doctor for treatment advice.

If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

If in eyes: Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

**TOXICOLOGICAL INFORMATION:** No specific antidote is available. Treat the patient symptomatically.

## STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

**PESTICIDE STORAGE:** Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

**PESTICIDE DISPOSAL:** For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

**CONTAINER DISPOSAL:** Do not reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
2. Make the empty, rinsed container unsuitable for further use.

If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.